| Genus | Vol. **20**(2): 335-339 | Wrocław, 15 VII 2009 |
|---|---|---|

# *Aulacophora sulaksonoi,* a new species of chrysomelid beetle from Sumba, Indonesia (Coleoptera: Chrysomelidae: Galerucinae)

MOHAMED S. MOHAMEDSAID
48 Jalan SS 15/3A, 47500 Subang Jaya, Selangor, Malaysia, msms@pc.jaring.my

ABSTRACT. *Aulacophora sulaksonoi,* a new species of chrysomelid beetle of the subfamily Galerucinae is described from Sumba, Indonesia. The new species resembles *A. indica* (GMELIN, 1790) and *A. fauveli* BEENEN, 2008 in having dorsal surface entirely brownish or yellowish brown and males with erect hairs on shoulders, but differs significantly with structures on the median lobe of apical sternite and the presence of hook at the apex of aedeagus.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Galerucinae, *Aulacophora,* Sumba, Indonesia.

## INTRODUCTION

A new species of chrysomelid beetle of the genus *Aulacophora* CHEVROLAT was discovered during a visit to Sumba. The island is one of a chain of islands of the Lesser Sunda Islands, Indonesia. It is located at the coordinate 9 degrees 40' Southern Latitude and 120 degrees Eastern Longitude. Biogeographically, the Lesser Sunda Islands, located east to the Wallace's Line, belongs to the Australasian Region. Presently, there are eight species of *Aulacophora* recorded from the Lesser Sunda Islands (KIMOTO 1990), compared with 48 species recorded from Sundaland (BARROGA and MOHAMEDSAID 2002), a subregion of the Oriental Region located in the west of the Wallace's Line.

*A. cornuta* BALY and *A. coffeae* (HORNSTEDT) are two out of the eight species from the Lesser Sunda Islands with elytra entirely brownish or yellowish-brown that is similar with the new species. The remainder six species have various forms of black markings on the brownish- or yellowish-brown background. The two above-mentioned species differ in having the clypeus black and the legs entirely blackish. The male of *A. cornuta*

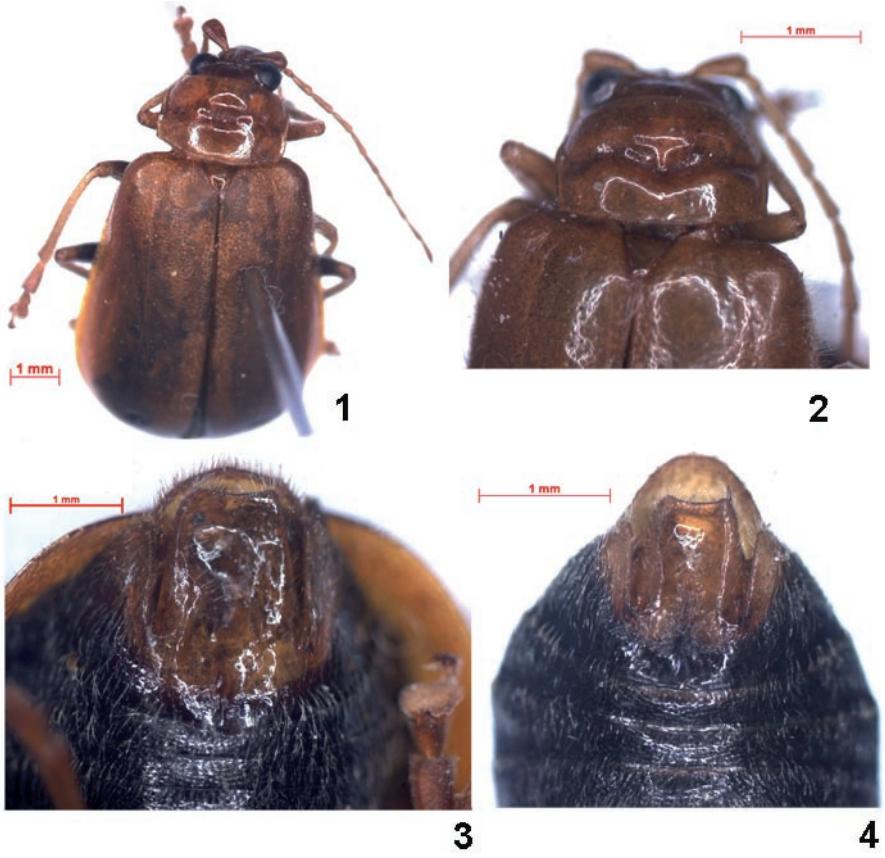
has the area below each antenna modified, with a horn like structure and the male *A. coffeae* has the antennae thickly covered with long hairs. The new species also resembles *Aulacophora indica* (Gmelin), a widely distributed species in Oriental Region, and *A. fauveli* Beenen, 2008, a recently described species from New Caledonia (Australasian Region), in having dorsal surface entirely brownish or yellowish brown and males with erect hairs on shoulders. Examination on the male apical sternite and aedeagus shows the differences between the new species and both *A. indica* and *A. fauveli*.

The new species is herein described and illustrated. Holotype and duplicate of paratype are deposited in the Museum Zoologicum Bogoriense, Bogor, Indonoesia (BOGOR). Paratypes are deposited in the Centre for Insect Systematics, Universiti Kebangsaan Malaysia, Bangi, Malaysia (UKM).

## TAXONOMY

### *Aulacophora sulaksonoi*, new species

(Figs 1-6)



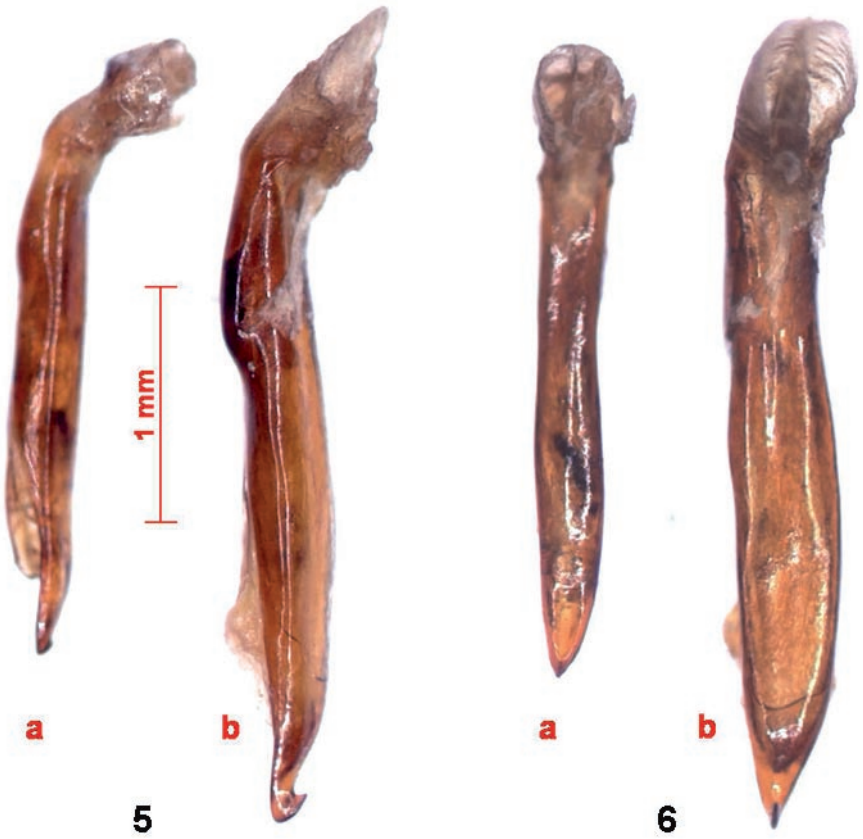

1, 3. *Aulacophora sulaksonoi* n. sp.; 2, 4. *A. indica* (Gmelin): 1 – habitus, 2 – pronotum, 3 – male apical sternite with the left border of median lobe tuberculate at base and with row of hairs, 4 – male apical sternite

ETYMOLOGY

The new species is named after Prof. Dr. Sulaksono SASTRODIHARDJO, my entomology teacher when I did my undergraduate studies at the Institute of Technology Bandung, Indonesia.

DIAGNOSIS

*Aulacophora sulaksonoi,* new species, differs from the other two other species of *Aulacophora* with the dorsal surface entirely brownish or yellowish and the males with erect hairs on shoulders. The new species has a larger size (9.1-10.2 mm) compared with the other two species (5.9.5-8.0 mm), pronotum with transverse depression, not sinuate in the middle, apical sternite with the median lobe deeply concave, the left side of the lobe tuberculate at base and with a row of long hairs, and aedeagus with hook at the apex. The female with pygidium rounded at apex, not conical and the apical sternite not bilobate.




5, 6. Aedeagus: 5 – lateral, 6 – ventral (a - *Aulacophora indica* (GMELIN), b – *A. sulaksonoi* n. sp.)

Description

Body form oblong-elongate. Dorsal surface entirely brownish, ventral surface with pro- and mesosternum brownish, metasternum and abdomen, except the median lobe of apical sternite black, legs brownish except femora black.

Head with vertex, convex, smooth, impunctate; frontal tubercles distinct, transverse, behind with a deep transverse groove; fronto-clypeus triangularly raised; labrum transverse, truncate, with row of long hairs near the base; mandibles strongly curved, blackened at tips; maxillary palpi with penultimate segment swollen, the apical segment smaller, conical. Eyes prominent, with interocular space twice as broad as the transverse diameter of each eye; distance across eyes narrower than pronotum. Antenna moderately long, extending to middle of elytra; segment 1 greatly enlarged, club-shaped, broadest at apex; segment 2 shortest, twice as long as broad; segment 3 twice as long as second; segments 4-11 gradually narrower towards apex. Pronotum transverse, 1.5 times as broad as long, subparallel-sided, broader at apical one-third; anterior and posterior borders margined, lateral border moderately explanate; anterior margin slightly concave, posterior margin broadly rounded posteriorly; all angles with a setigerous pore and with seta; anterior angles tuberculate, posterior angles obtuse; disc transversely sulcate, shallow and broader in middle, not sinuate, narrower and deeper reaching at sides, sparsely impressed with moderately large punctures on the antero- and posterolateral areas. Procoxal cavities opened posteriorly. Pro- and mesosternum glabrous, metasternum glabrous in middle area, densely covered with white pubescence at sides. Scutellum triangular, as long as broad, rounded at apex, smooth, impunctate. Elytra 1.5.times as long as broad, subparallel-sided, broadened posteriorly, rounded at apex; subbasal area not depressed; humerus prominent, covered with erect hairs; disc densely impressed with fine punctures. Legs long, slender. All tibiae with a spine at apex. Protarsus with the first segment thickened, with pad beneath, as long as the remainder segments combined, mesotarsus with the first segment thickened, as long as the remainder segments combined, metatarsus with the first segment elongate, as long as the remainder segments combined. Tarsal claws bifid. Abdomen densely covered with white pubescence. Apical sternite longer than the first four visible sternite combined, trilobed; median lobe oblong, 1.5 times as long as broad, shiny, deeply concave, with sides folded inward, tuberculate at base, the left side lined with row of long hairs. Pygidium rounded at apex, surface sparsely covered with hairs, apical margin with rows of long hairs. Aedeagus with basal piece strongly curved, the apical piece straight and with a large hook at the apex. Body length 9.1-10.1 mm.

Female. Antennal segment one not enlarged, humerus without erect hairs, legs entirely brownish, apical sternite and and pygidium rounded at apex.

Body length 9.1-10.2 mm.

Materials Examined

Holotype male: INDONESIA: Sumba, Waimangura, 6.vii.2008, coll. M. S. Mohamedsaid (BOGOR); paratype males same data: 2 males (UKM), male (BOGOR),

paratype females: Sumba, Waikabubak, 7.vii.2008, coll. M. S. Mohamedsaid, female (UKM), female (BOGOR).

ACKNOWLEDGEMENT

I would like to thank Dr. Idris Abd GHANI, Centre for Insect Systematics, Universiti Kebangsaan Malaysia, Bangi, for the permission to use image analyzer for the illustration of this paper.

REFERENCES

BARROGA, G. F., MOHAMEDSAID, M.S., 2002. Revision of the genus *Aulacophora* CHEVROLAT (Coleoptera: Chrysomelidae: Galerucinae) in Sundaland. Serangga, **7**(1-2): 15-194.

BEENEN, R., 2008. Contribution to the knowledge of Galerucinae of New Caledonia (Coleoptera: Chrysomelidae). Genus, Wrocław, **19**: 65-87.

KIMOTO, S., 1990. Checklist of Chrysomelidae of South East Asia, South of Thailand and West of Irian-Jaya of Indonesia, V. Galerucinae, 1. Kurume Univ. Journ., **39**: 23-56.